

ABSTRACT

A device and a method for determining an angle of rotation between a camshaft (5) and a crankshaft of an internal combustion engine is provided, the device including a camshaft regulator provided with an electronic regulator, and a device for determining the position of the angle of rotation of the camshaft and the crankshaft. A crankshaft triggering wheel provided with reference and trigger marks is fixed to the crankshaft for determining the position angle of rotation of the crankshaft, and an electromechanical camshaft regulator is provided, including a triple-shaft gearbox(1), the first shaft (3) being connected to the camshaft (5) in a rotationally locked manner, the second shaft (4) being connected to the crankshaft via a camshaft drive wheel, and the third shaft, as the regulating shaft (6), being connected to a permanent magnet rotor (8) of a BLDC motor (2) which has a stator (9) that is fixed to the housing, and an electronic commutation that can be controlled by commutation signals that are used both for determining the position of the angle of rotation of the camshaft (5), and together with the signals of the crankshaft trigger wheel, for calculating the angle of rotation between the camshaft (5) and the crankshaft.